

SAND HILLS

RANGE SITE DESCRIPTION

Desert Grassland PE 10-19

Land Resource Area: Trans-Pecos

1. TOPOGRAPHY AND ELEVATION!!: This site occupies undulating to rolling areas. Slopes range from 11 to 12 percent. Elevation ranges from 2600 to 2800 feet.
2. SOILS:
 - a. The soils are deep, with reddish brown to brown fine sand surfaces and subsoils. These soils are more than 80 inches thick. Permeability is rapid to very rapid. Wind erosion susceptibility is high.
 - b. The soil taxonomic unit that characterizes this site is:

Penwell Duneland
Penwell fine sand
 - c. Specific type site location:

Williams Ranch - 11 miles west of Penwell
Horse pasture (15) west of headquarters on IS 20.
3. CLIMATE: See Field Office Climatic Description
4. CLIMAX VEGETATION!!:
 - a. The climax plant community is bunchgrass prairie. The primary grasses are sand bluestem, giant and mesa dropseed, spike dropseed, sideoats grama, and Havard panicum. Other grasses in the climax are sand dropseed, fall witchgrass, sand paspalum, hooded windmillgrass, and perennial threeawn. About 10% of the area is occupied by Havard oak. Some catclaw is found as scattered through the site. Sand sage is found in some of the more level areas between sand hills.

Relative Percentage

Grasses	85%	Woody	10%	Forbs	5%
Little bluestem	5	Havard oak		Halfshrub	5
Sand bluestem	10	Catclaw		Range Ratany	T
Havard panicum	5	Sand sagebrush		Gaura	T
Giant dropseed	15	Yucca		Euphorbias	T
Mesa dropseed	15	Queen's delight			
Spike dropseed	5				
Sand dropseed	5				
Wright & Purple threeawn	5				
Sand reed	10				
Fall witchgrass)					
Hooded windmillgrass)	10				
Sand paspalum)					

- b. As the site declines from climax, the bluestem gives way to dropseeds and Havard oak increases. Mesquite may increase to the extent that they also create a problem. Under extreme conditions this site deteriorates to active dunes and blowouts and is very difficult to revegetate.
- c. Approximate total annual yield of the site in excellent condition ranges from 600 pound per acre in low rainfall years to 2000 pounds per acre of air-dry vegetation in normal rainfall years.
5. WILDLIFE NATIVE TO THE SITE: Primarily quail and dove are found on this site. The woody vegetation and variety of grasses and forbs provide good cover and food for game birds.
6. AESTHETIC AND RELATED VALUES: The terrain of this site is made up of small valleys between sand dunes. This gives the site of a rolling appearance. The vegetation on this site is made up of bunchgrasses. Following good spring rains an abundance of colorful forbs can be seen.
7. HYDROLOGIC CHARACTERISTICS:
Deep sandy soils with rapid permeability inhibit runoff. A good plant cover is necessary to protect from blowing. Water erosion is not a hazard.

8. GUIDE TO INITIAL STOCKING RATE:

a. Condition Class	Percentage Climax Vegetation	AU/SEC	AC/AU/YR
Excellent	76-100	15-25	25-42
Good	51-75	12-17	37-53
Fair	26-50	6-13	49-106
Poor	0-25	7 or less	91+

- b. Seeded Areas
No usually seeded.

9. RELATIVE FORAGE QUALITY OF SPECIES:

a. Cattle		
<u>PRIMARY*</u>	<u>SECONDARY*</u>	<u>LOW VALUE*</u>
Sand bluestem	Sand dropseed	Mesquite
Little bluestem	Fall witchgrass	Fringed signalgrass
Giant dropseed	Havard panicum	Gummy lovegrass
Sideoats grama	Sand paspalum	Red lovegrass
Mesa dropseed	Bristle panicum	
	Threeawn	
	Sand muhly	
	Havard oak	
	Sand sagebrush	
	Evening primrose	
	Hooded windmillgrass	
b. Sheep and Goats		
<u>Plains bristlegrass</u>	Giant dropseed	Mesquite
Black grama	Sand dropseed	Fringed signalgrass
	Mesa dropseed	Gummy lovegrass
	Cane dropseed	Threeawn
	Sand paspalum	Havard panicum
	Bristle panicum	Red lovegrass
	Havard oak	
	Sand sagebrush	
	Evening primrose	
	Gaura	
	Hooded windmillgrass	
c. Quail and Dove		
<u>PRIMARY**</u>	<u>SECONDARY**</u>	<u>LOW VALUE**</u>
Plains bristlegrass	Giant dropseed	Sand sagebrush
Sand paspalum	Sideoats grama	Gummy lovegrass
Bristle panicum	Mesa dropseed	Threeawn
Havard oak	Hooded windmillgrass	Sand bluestem
Sand sagebrush	Havard panicum	Little bluestem
Evening primrose	Havard oak	
Croton	Gaura	

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